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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,867	06/04/2001	Emad M. Awadalla	10007051-1	4669

7590 10/06/2004

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
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EXAMINER

POLTORAK, PIOTR

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/873,867	Applicant(s) AWADALLA, EMAD M.	
	Examiner Peter Poltorak	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-29 have been examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 4, 10, 11, 13, 14, 17-19, 23, and 26-28 are indefinite due to the recitation "identifier". It is unclear to what object the identifier pertains: the file, the printer or a device. For example, in claim 1, the "identifier" could pertain to a file or a printer. As a result, the metes and bounds of the claims cannot be determined.
3. Also, "a source for identifiers" in claim 19 is not well understood. It is not clear whether it refers to the code source, an entity providing identifiers or something else. The examiner considers the statement referring to the entity that where the identifiers originated.
4. Claims 5 and 19 recite limitation of "a flag recognizable solely by the printer for indicating an encryption algorithm for use in said encrypting". It is unclear how encrypting/decrypting is possible without encrypting entity (e.g. computer) being kept unaware of the type of encrypting algorithm being employed. Claims 14 and 26 pose essentially the same problem and thus they are similarly rejected.

For further consideration the examiner considers the statements

"recognizable solely/only by the printer/device" as "recognizable by the printer/device".

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5. Claim 3 suggests that a printer description language format cited in claim 1 is "postscript", ".pcl", ".pdf" and an ".xml". However, in the art "postscript" for example is most often associated with a page description language. Thus the examiner is not sure whether the applicant uses these two terms interchangeably or whether the "printer description language" is used here in order to explicitly differentiate it from the page description language. Similarly, the art uses PCL, PDF etc. (with no preceding dot) in reference to printer languages. The examiner is not sure whether the applicant using ".pcl" and ".pdf" to explicitly differentiate these formats from PCL and PDF or whether they should be treated as equivalents. Clarification in regard to this matter is requested.
6. Claims 7 and 14 are confusing. Claim 7 refers to the method of claim 5 which leads to belief that limitations are directed to the actions performed on the computer. However, the claim language suggests that the limitations are directed to the actions performed on the printer. The examiner examines the claim as though the limitations are directed to the printer. In order to avoid confusion the examiner suggests changing claim 7 so that it refers to claim 4.
7. Similarly, claim 14 refers to claim 13 addressing "said providing". However, "providing" is not present in claim 13 but it is introduced on the previous claim 11. In order to avoid confusion the examiner suggests changing claim 14 so that it refers to claim 11.

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8. The phrase "wherein at least one processor of said first device *includes* at least one encryption algorithm" in claim 18 is not well understood. For further consideration the examiner considers the phrase as the "at least one processor" utilizes the encryption algorithm (*to encrypt data*).
9. The phrase "remotely" in "available to said second device remotely in time from transmission of the file across the computer network" in claim 22 is not well understood. It is not clear whether the limitation refers to decryption algorithm being available in advance or being available remotely.
10. "Said decryption key corresponding to said flag for facilitating recognition thereof" in claim 28 is not well understood. It is not clear whether the limitation refers to the "recognition" cited in the (base) claim 26, which refers to use of the flag in order to select a decryption algorithm or to ability of recognize a decryption key based on the flag. For the purpose of the further examination the examiner considers that the "said flag for facilitating recognition thereof" refers to ability to recognize a decryption algorithm.
11. Claim 2-3, 5-9, 12, 15-16, 20-22, 24-25 and 29 are rejected by virtue of their dependence.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

12. Claims 1-4, 11-12, 17-18, 21 and 23-25 are rejected under 35 U.S.C.

102(e) as being anticipated by *Chan et al.* (U.S. Patent No. 6378070).

13. *Chan et al.* teaches converting a file for printing to a printer description language format (*col. 6 lines 14 –17*), encrypting said file (*col. 6 lines 18-20*), providing said file with an identifier for the printer (*identity of the intended recipient of the file, but also it could be the document details, col. 6 lines 2-8*) and transmitting the file to the printer (*col. 7 lines 21-25 and lines 43-51*). *Chan et al.* teach limitations of claim 4 in *col. 7 lines 1-51* including implicit teaching of selecting an appropriate decryption algorithm which is used for the document decryption.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-3, 11-12, 17-18 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Matsui et al.* (U.S. Patent No. 6167514) in view of *Hirst et al.* (U.S. Patent No. 5930553) and *Printerdriver.net* (<http://www.printerdriver.net/faqpcl.htm>, April 2001).
15. *Matsui et al.* teach a method for securely transmitting data between a computer (PC) and a printer including converting a file to be transmitted, encrypting a file transmitting said file to the printer and decrypting file by the printer (col. 1 lines 58-col. 2 lines 10, Fig. 1). The limitation of providing said file with an identifier for the printer is implicit as lines 20-31 in col. 10 show that the printer notifies the PC whether the printing was normally carried out. It is also implicit that in order to notify the PC about the carried out printing of the file the printer receives said file, recognizes and validates said identifier, selects an appropriate decryption algorithm which reads on claim 4.
16. *Matsui et al.* do not explicitly teach converting a file for printing to a printer description language format.
17. *Hirst et al.* teach converting a file for printing to a printer description language and *Printerdriver.net* teaches that description language format is the most widely used format in the laser printer market.
18. It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to convert a file for printing to a printer description language format such as postscript format as taught by *Hirst et al.* prior to encryption and transmission of the file in order for the file being correctly interpreted (*printed*) by wide variety of laser printers.

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19. Claims 11-12, 17-18 and 23-25 are substantially equivalent to claims 1-2;
therefore claims 11-12, 17-18 and 22-25 are similarly rejected.
20. As per claim 22 the limitation of the claim is addressed by *Matsui et al.* in col.
1 lines 58-62.
21. **Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over**
Matsui et al. (U.S. Patent No. 6167514) in view of Hirst et al. (U.S. Patent
No. 5930553) and Printerdriver.net
(<http://www.printerdriver.net/faqpcl.htm>, April 2001). and in further view
of Math.Berkeley.edu
(<http://math.berkeley.edu/~strain/55.S01/pdfandps.html>).
22. *Matsui et al.* in view of *Hirst et al. and Printerdriver.net* converting said file as
discussed above.
23. *Matsui et al.* in view of *Hirst et al. and Printerdriver.net* do not explicitly teach
converting said file to at least one of a postscript format, a .pcl format, a .pdf
format, and an .xml format.
24. *Math.Berkeley.edu* teaches that *postscript* provides high quality printing.
25. It would have been obvious to one of ordinary skill in the art at the time of
applicant's invention to choose postscript format as a choice of a printer
language in order to obtain high quality printing.
26. **Claims 5-10, 13-16, 19-20 and 26-29 are rejected under 35 U.S.C. 103(a)**
as being unpatentable over *Matsui et al. (U.S. Patent No. 6167514) in*
view of *Hirst et al. (U.S. Patent No. 5930553) and Printerdriver.net*
(<http://www.printerdriver.net/faqpcl.htm>, April 2001) and further in view

of Chen (U.S. Patent No. 6058187) and Leppek (U.S. Patent No. 6233338).

27. *Matsui et al.* in view of *Hirst et al.* and *Printerdriver.net* teach secure communication as discussed above.
28. As per claim 5 in view of *Hirst et al.* and *Printerdriver.net* do not teach providing said file with a flag for indicating an encryption algorithm for use in said encrypting recognizable by the printer.
29. *Chen* teaches providing said file with a flag for indicating an encryption algorithm (*algorithm selection code*) for use in said encrypting (*Chen*, Fig. 3 object 302, and col. 4 lines 5-9) and *Leppek* provides motivation to combine teaching importance of changing encryption schemes in secure data communication (*Leppek*, col. 1 lines 56—63).
30. As per claim 7-9 validating of said flag including entering a decryption key corresponding to said flag is implicit, since *Matsui et al.* and *Chen* teach encryption and decryption, and the decryption utilizes a decryption key corresponding to said flag.
31. As per claim 13 it is implicit that said file is provided with an identifier for the first device as lines 20-31 in col. 10 show that the printer notifies the PC whether the printing was normally carried out.
32. Claims 14-16 and 26 and 27 are substantially equivalent to claims 5-7; therefore claims 14-16 are similarly rejected.
33. Claim 19 is substantially equivalent to claim 13; therefore claim 19 is similarly rejected.

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34. Limitations of claims 20, 28 and 29 are implicit; the decryption key must be used in addition to decryption algorithm in order to decrypt file. Also, the decryption key is produced within the printer and thus it is implicit that an input element for entry of decryption key is separate from receipt of the file which is received using the network means.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Signature

Date

09/30/04


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